

CLAIMS:

1. A high-pressure discharge lamp (1) comprising at least
 - one burner (2) having a discharge space,
 - two electrodes extending in the discharge space,
 - a gas filling in the discharge space that contains at least an inert gas and a metal halide mixture,
 - and comprising a tubular outer bulb (3) having two ends, the burner (2) being attached, at least at one end, to the outer bulb (3), characterized in that the outer bulb (3) comprises at least one light-absorbing means (5) and at least one interference filter (6), and an interference filter (4) is arranged on or in at least a part of the burner (2).
2. A high-pressure discharge lamp (1) as claimed in claim 1, characterized in that the interference filter (4) is arranged on the outer surface of the burner.
3. A high-pressure discharge lamp (1) as claimed in claim 1, characterized in that a light-absorbing means (5) is provided on the inner surface of the outer bulb (3), and a light-absorbing means (5) is provided between the outer surface of the outer bulb (3) and the interference filter (6).
4. A high-pressure discharge lamp (1) as claimed in claim 1, characterized in that at least at the surfaces of the areas that are used to attach the burner (2) to the outer bulb (3), no light-absorbing means and/or interference filters are arranged.
5. A high-pressure discharge lamp (1) as claimed in claim 1, characterized in that the light transmittance of the interference filter (4) and of the interference filter (6), with regard to the wavelength range of 600 to 800 nm, is > 90% for both.
6. A high-pressure discharge lamp (1) as claimed in claim 1, characterized in that the light transmittance of the light-absorbing means (5) with regard to the wavelength range of 600 to 800 nm ranges between 70 and substantially 100%.

7. A high-pressure discharge lamp (1) as claimed in claim 1, characterized in that the layer thickness of the interference filters ranges between 800 and 2800 nm.

5 8. A high-pressure discharge lamp (1) as claimed in claim 1, characterized in that the interference filter is composed of a plurality of layers, the layer structure being such that a layer having a higher refractive index alternates with a layer having a lower refractive index, the layer having the lower refractive index preferably consisting predominantly of SiO_2 and the second layer being composed of a material having a higher refractive index than SiO_2 .

10 9. A high-pressure discharge lamp (1) as claimed in claim 8, characterized in that the second layer is composed of a material selected from the group consisting of titanium oxide, tantalum oxide, niobium oxide, hafnium oxide, silicium nitride, very preferably zirconium oxide ZrO_2 , or a mixture of said materials.

15 10. A high-pressure discharge lamp (1) as claimed in claim 1, characterized in that the layer thickness of the light-absorbing means (5) ranges between 5 nm and 10,000 nm.

20 11. A high-pressure discharge lamp (1) as claimed in claim 1, characterized in that the light-absorbing means (5) contains inorganic pigments, which absorb part of the visible light and the average diameter of which is below 100 nm.

25 12. A high-pressure discharge lamp (1) as claimed in claim 11, characterized in that the inorganic pigment is composed of a material or an oxide selected from a group consisting of iron oxide, zinc-iron-oxide ($\text{Zn-Fe}_2\text{O}_4$ or $\text{ZnO-ZnFe}_2\text{O}_4$), phosphor-doped iron oxide, zinc-iron-chromium, bismuth-vanadate, in particular pucherite bismuth-vanadate, vanadium oxide, zirconium-praseodymium-silicate, titanium-antimony-chromium, nickel-antimony-titanium and silver, or the mixtures thereof.

30 13. A light system for motorcars comprising at least a high-pressure discharge lamp (1) as claimed in claims 1 through 12.